

WHAT IS CLAIMED IS:

1. A method of controlling an ejection molding process of an ejection molding machine, comprising actions of:

5 monitoring machine status whereby information relating to operation of an injection machine are presented on a control panel;

 setting temperature whereby settings relating to control of temperature and heating are done;

 setting clamp whereby operations of the machine relating to mold
10 closing, mold opening, and mold adjustment are set respectively;

 setting front injection/charging whereby operations of the machine relating to injection, maintenance of pressure, charging of materials are set respectively;

 setting pushing/blowing whereby operations of the machine are set
15 that relate to “a middle ejector pushing”, “a support base of a male mold part rotating”, “a front ejector pushing”, “a rear ejector pushing”, and “air blowing”;

 setting function/time whereby operations of the machine are respectively set that relate to a function switch, an initial pressure on
20 front side and rear side, and time;

 setting data of products whereby data of production, and parameters of quality control of molded products are input respectively;

 setting about cores whereby operations of the machine and a mold

relating to a plurality of cores are set;

setting auto purge/carriage whereby operations of the machine and the mold are set respectively that relate to position control of front and rear screw rods, and purging of materials;

- 5 setting backward injection/charging whereby operations of the machine are set respectively that relate to injection, pressure maintenance, and material charging; and

setting an automatic process; the action of setting an automatic process being right after the action of setting function/time; the setting of
10 an automatic process including:

a first part whereby those motions can be set that are to be performed after completion of the mold-opening action by means of choosing among prepared options provided for setting each motion; and

a second part whereby those motions can be set that are to be
15 performed after completion of the mold-closing action by means of choosing among prepared options provided for setting each motion;

whereby motions of the molding machine and a mold at various stages of an injection molding process can be set and changed according to nature of the mold.

- 20 2. The method of controlling an ejection molding process of an ejection molding machine as claimed in claim 1, wherein one of the options provided for setting of motions to be performed after completion of the mold-opening action is “no movement”.

3. The method of controlling an ejection molding process of an ejection molding machine as claimed in claim 1, wherein options provided for setting a first motion to be performed after completion of the mold-closing action include “NO” (no movement), “middle ejector pushing”, and “gate valve on”.
4. The method of controlling an ejection molding process of an ejection molding machine as claimed in claim 1, wherein options provided for setting second and fourth motions to be performed after completion of the mold-closing action include “NO” (no movement), “two color injection at the same time” (two different color materials are injected into the mold at a same time), “front side injection” (materials are injected through a front side of the mold), and “rear side injection” (materials are injected through a rear side of the mold).
5. The method of controlling an ejection molding process of an ejection molding machine as claimed in claim 1, wherein options provided for setting a third motion to be performed after completion of the mold-closing action include “NO” (no movement), “middle ejector backwards” (a middle ejector moves backwards), “gate valve off” (the gate valve shuts), “middle ejector forwards” (the middle ejector moves forwards), and “gate valve on” (the gate valve opens).
6. The method of controlling an ejection molding process of an ejection molding machine as claimed in claim 1, wherein options provided for setting a fifth motion to be performed after completion of the

mold-closing action include “NO” (no movement), “middle ejector backwards” (a middle ejector moves backwards), and “gate valve on” (the gate valve opens).

5

10

15

20